

APPENDICES

APPENDIX A

ACHIEVEMENT TEST

MM: 30

Science Class test

Class:

Date:

Name:

Period:

Q1) Fill in the Blanks: (10)

- a) is the essential element of human life.
- b) Dirty water from sinks, showers, toilets, laundries is called.....
- c) The process of wastewater treatment is commonly known as.....
- d) The increasing scarcity of fresh water is due to.....
- e)is the wastewater released by homes, industries, hospitals etc.
- f) Network of big and small pipes used for the disposal of wastewater are called.....
- g) Water consist of dissolved and suspended impurities called.....
- h) Purification of water with the help of filter paper is called.....
- i) Poor sanitation and contamination drinking water causes.....
- j) Driedis used as manure.

Q2) Choose the correct option: (5)

- 1. Bar screen is used to remove things from water
(a) Napkins (b) bacteria (c) sand (d) none of the above
- 2. World water day is celebrated on
(a) 22 march (b) 27 march (c) 4 April (d) 24 April
- 3. Transport system that carries sewage from the point of being produced to the point of disposal.
(a) landfills (b) filtration (c) sewerage (d) A and B
- 4. Things that harden and block the pipes

D-421

(a) oil and fats (b) chlorine (c) ozone (d) microbes

5. The gas is produced which is used as a source of energy

(a) nitrogen (b) oxygen (c) biogas (d) none of above

Q3) Name the followings:

(10)

a) Name two chemicals used to disinfect water

.....

b) Name two disease caused by polluted water

.....

c) Name two organic impurities suspended in water

.....

d) Name two inorganic impurities suspended in water.....

e) Name two chemicals which kills microbes

.....

Q4) what steps will you choose to clean the environment and why?

(5)

Science Class Test

Class:

Date:

Name:

Period:

Q1) Mark 'T' if the statement is true and 'F' if it is false. (5)

- a) Water is not essential for all living being. ()
- b) 55% of drinking water is available on the earth. ()
- c) Water shortage is a problem faced only by people living in rural areas. ()
- d) Water from rivers is the only source for irrigation in the field. ()
- e) Rain is the ultimate source of water. ()

Q2) Fill in the Blanks. (9)

- a) People obtain ground water through and
.....
- b) Three forms of water are, And
.....
- c) The process of seeping of water into the ground is called
- d) The ground water is stored between layer of hard rock below the water table
.....
- e) The water found below the water table is called
- f) Solid form of water is
- g) The changing of water into vapor is called
- h) The process of conserving rain water is called
.....
- i) is the process of using water by the farmer in the fields.

Q3) what are the roles you can play to conserve water. (3)

Q4) Draw a Water Cycle. (3)

APPENDIX B

LESSON PLANS

Planning of lesson 1

Class- VII

Subject- Science


Teaching methods-multimedia teaching approach

Specific objective-

1. student will be able to know the sources of waste water
2. student will be able to know the sources of water pollution

Teaching aids-computer, projector and multimedia program.

Previous knowledge-children have basic knowledge about waste water

Teaching points	Teaching strategies	Conclusion
<p>Waste water</p> <p>Sources of waste water</p> <p>Sources of water pollution</p> 	<p>Teachers divided the students into groups and show them some pictures of dirty water with the help of projector and ask the student to observe the pictures.</p> <p>Then teacher ask the student what they have observed</p> <p>Then students discuss and give the different answers.</p> <p>That the water given in this picture is not pure</p> <p>That water is not fit for drinking purpose.</p> <p>Drinking impure water causes many diseases.</p> <p>Then teacher ask the</p>	<p>The water from drains, sinks, toilets, laundries are known as waste water</p> <p>It creates the water pollution</p> <p>Drinking polluted water causes many diseases and also harmful to aquatic animals</p>

	<p>sources of waste water Students list out some sources like drains, sinks, toilets, laundries etc</p> <p>Then teacher ask the about the pollution. Students now engage to find the answer.</p> <p>And give the answers of different types of pollution like air pollution, land pollution and water pollution</p> <p>Then teacher ask to list out some sources of water pollution student give the answer like waste from home, industries and chemicals from factories get disposed into the water and water become contaminated.</p>	
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Recapitulation – What is waste water, water pollution, sources of water pollution and waste water?

Evaluation-given some activities, some oral questions for student which is related to meaning of waste water, what are the effects of waste water?

Home assignment-students give the examples of the use of clean water.

- Students give the PPT of the pollution in groups.

Planning of lesson 2

Class- VII

Subject- Science


Teaching methods-multimedia teaching approach

Specific objective-

1. student will be able to know the meaning of sewage
2. student will be able to know that swage consist of many dissolved impurities

Teaching aids-computer, projector and multimedia program.

Previous knowledge-children have basic knowledge about waste water and drain water

Teaching points	Teaching strategies	Conclusion
<p>Sewage</p> <p>Contamination</p> <p>Different types of contamination</p> <p>Examples of different types of contamination</p> 	<p>Teachers divided the students into groups and show them some pictures of dirty water with the help of projector and ask the student to observe the pictures.</p> <p>Then teacher ask the student what they have observed</p> <p>That water is not fit for drinking purpose.</p> <p>That water also called as sewage water. Why sewage water is black in color?</p> <p>Student response that the sewage water do not have dissolved oxygen</p> <p>Sewage water consists of</p>	<p>The waste water from drains, sinks, toilets, laundries are known as sewage water</p> <p>It creates the water pollution</p> <p>Sewage water consist of many dissolved organic and inorganic impurities</p> <p>It causes disease like cholera, typhoid, dysentery etc.</p>

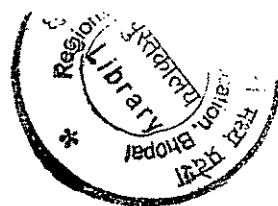
	<p>carbon dioxide.</p> <p>Sewage water consist of a mixture of dissolved solids, organic and inorganic impurities and disease causing bacteria.</p> <p>Then teacher give the ppt of different type of things like human faeces, animal waste , nitrates, phosphates, metals, phosphorus etc.</p> <p>Then teacher ask student to categories them into different the forms of impurities</p> <p>Student response-human faeces is organic impurities and metal, phosphorus are inorganic impurities.</p>	
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Recapitulation – sewage water, different forms of impurities present in sewage water

Evaluation-given some activities, some oral questions for student which is related to meaning of sewage water, what are the effects of sewage water? what are the impurities?

Home assignment-students give the examples of some more impurities with the help of internet

- Students give the PPT of sewage water in groups.



Planning of lesson 3

Class- VII

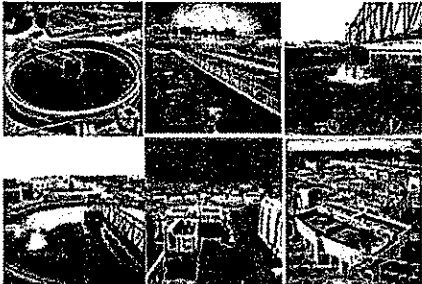
Subject- Science

Teaching methods-multimedia teaching approach

Specific objective- student will be able to know the working of waste water treatment plant.

Teaching aids-computer, projector and multimedia program, audio video clipping of waste water treatment plant

Previous knowledge-children have basic knowledge about waste water and drain water

Teaching points	Teaching strategies	Conclusion
<p>Treatment of polluted water</p> <p>The working procedure of waste water treatment plant.</p> 	<p>Teachers divided the students into groups and show them one video clipping of waste water treatment plant with the help of projector and ask the student to observe the clipping</p> <p>Then teacher ask the student what they have observed.</p> <p>Then students observed the different procedure where the waste water passes like bar screen, scraper, water clarifier aerator tank and chlorination tank</p>	<p>The waste water can be pure with the help of waste water treatment plant</p>

Recapitulation – the working of waste water treatment plant

Evaluation-What is waste water treatment plant?

Home assignment- List out some water treatment plant in their city.

Planning of lesson 4

Class- VII

Subject- Science

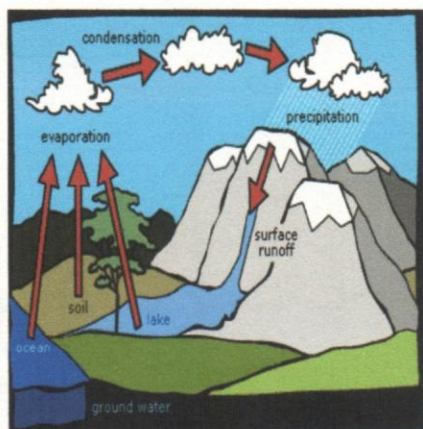
Teaching methods-multimedia teaching approach

Specific objective- student will be able to understand the water cycle

Teaching aids-computer, projector and multimedia program, audio video clipping of water cycle

Previous knowledge-children have basic knowledge about the composition of water on earth

Teaching points	Teaching strategies	Conclusion
<p>Water cycle</p> <p>Process of evaporation</p> <p>Process of condensation</p> <p>Process of precipitation</p>	<p>Teachers divided the students into groups and show them one video clipping of water cycle with the help of projector and ask the student to observe the clipping</p> <p>Then teacher ask the student what they have observed.</p> <p>Then students observed that water gets evaporated, Then condense and comes out again on earth surface in the form of rain.</p>	<p>The process of converting water into vapor is called evaporation, cooling down of water vapor is known as condensation and again water come back into the earth surface in the form of rain and snow are called as precipitation.</p>



Recapitulation – water cycle, evaporation, condensation, precipitation

Evaluation-What is evaporation, condensation, precipitation?

Home assignment-student give PPT on water cycle in groups.



Planning of lesson 5

Class- VII



Subject- Science

Teaching methods-multimedia teaching approach

Specific objective- student will be able to understand how they can do better housekeeping practice

Teaching aids- computer, projector, multimedia program, and animated pictures.

Previous knowledge-children have basic knowledge about the recycle of waste material

Teaching points	Teaching strategies	Conclusion
<p>Better housekeeping practice</p>  	<p>Teachers divided the students into groups and show them some picture that where we have to dump a waste material help of projector and ask the student to observe the picture</p> <p>Then teacher ask the student what they have observed.</p> <p>Student response that it is a responsibility of every citizen that disposed waste material in a proper way so that it can be recycle and reuse</p>	<p>The waste material can be recycle and re use if separate properly</p>

Recapitulation – disposal of waste material, recycle and reuse

Evaluation-What is soluble and insoluble waste material?

Home assignment- List out various different home waste materials for recycles.

Planning of lesson 6

Class- VII


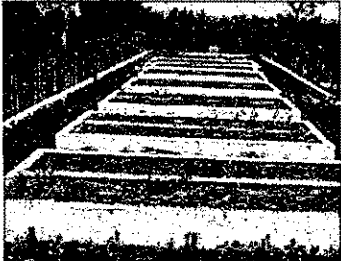
Subject- Science

Teaching methods-multimedia teaching approach

Specific objective- student will be able to understand the use of human waste

Teaching aids- multimedia program, audio video clipping vermicomposting

Previous knowledge-children have basic knowledge about that human waste is good for agriculture

Teaching points	Teaching strategies	Conclusion
<p>vermicomposting</p>  	<p>Teacher show some picture of vermicomposting and video clipping also and ask the student what is this and where it can be use?</p> <p>Student response this process is called vermicomposting that it is good for agriculture and increase the fertility of soil</p> <p>It can be done with the help earthworms. By this process the human and animal waste can be utilize properly.</p>	<p>Human waste is converted into vermi cakes with the help of earthworms which is good for agriculture as it can be a nature waste</p>

Recapitulation – vermicomposting

Evaluation- What is vermicomposting what it's utility?

Home assignment- What are the advantages of natural fertilizer?

Planning of lesson 7

Class- VII


Subject- Science

Teaching methods-multimedia teaching approach

Specific objective- student will be able to understand the harmful effect of poor sanitation

Teaching aids- multimedia program, pictures of poor sanitation

Previous knowledge-children have basic knowledge about the causes of diseases

Teaching points	Teaching strategies	Conclusion
<p>Harmful effect of poor sanitation</p> 	<p>Teacher show some picture of dirty water and place along with video clipping and ask the student about the pictures and video</p> <p>Student response that it is poor sanitation and contaminated drinking water is the cause of a large number of diseases.</p> <p>Teacher asks how can we protect our self by all these diseases.</p> <p>Student response that to clean our home and our environment</p>	<p>Poor sanitation causes harmful disease</p>

Recapitulation –poor sanitation and diseases

Evaluation- What is sanitation?

Home assignment- List out some diseases caused by waste water.

Planning of lesson -8

Class- VII

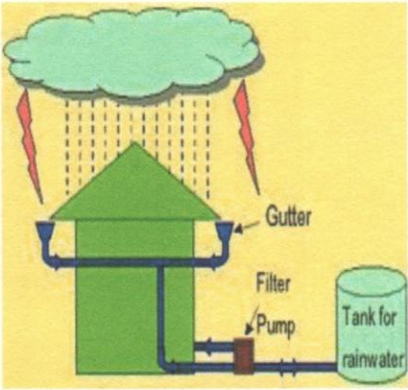
Subject- Science

Teaching methods-multimedia teaching approach

Specific objective- student will be able to understand water management and rain water harvesting

Teaching aids- multimedia program, pictures of rain water harvesting and video clipping

Previous knowledge-children have basic knowledge about the uses of water

Teaching points	Teaching strategies	Conclusion
<p>Water management Rain water harvesting</p>  <p>The diagram illustrates a rainwater harvesting system. It shows a green house with a green roof. A blue gutter is attached to the roof, leading to a blue pipe that runs down the side of the house. This pipe connects to a blue pipe that goes through a brown 'Filter' and a red 'Pump' before entering a green cylindrical 'Tank for rainwater' on the ground. Above the house, a green cloud is raining, with two red lightning bolts on either side.</p>	<p>Teacher show some picture that how to conserve water for further use for that purpose everybody should adopt the methods of rain water harvesting, and show video clipping and ask the student about the pictures and video</p> <p>Student response that with the help of pipe, filter, pump etc. We can conserve water at our home we can make a tank for rain water and manage the rain water.</p>	<p>Rain water harvesting is use to conserve rain water for further use</p>

Recapitulation –water management and rain water harvesting

Evaluation- how you conserve rain water?

Home assignment- what are the advantage of rain water harvesting.

Planning of lesson -9

Class- VII

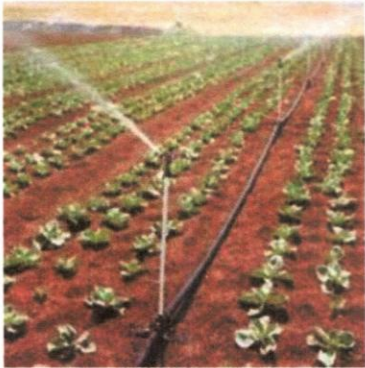
Subject- Science

Teaching methods-multimedia teaching approach

Specific objective- student will be able to understand the concept of drip irrigation

Teaching aids- multimedia program, pictures of drip irrigation and video clipping

Previous knowledge-children have basic knowledge about the irrigation

Teaching points	Teaching strategies	Conclusion
<p>Drip irrigation</p> 	<p>Teacher show some picture that how to conserve water for further use in agricultural field for that purpose farmer adopt the methods drip irrigation, show video clipping and ask the student about the pictures and video</p> <p>Student response that with the help of drip irrigation farmers can water large fields with minimum amount of water.</p>	<p>Drip irrigation is a technique of watering plants by making use of narrow tubing which deliver water directly at the base of the plant</p> <p><i>D. - 421</i></p>

Recapitulation –drip irrigation

Evaluation- what is drip irrigation?

Home assignment- what are the advantage of drip irrigation.